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PATHOLOGY LAB DEDICATED AT ZOO



Shown at dedication ceremonies are (left to right) Dr. William Mann, Miss Frances Dobell, and Dr. Willard Eyestone.

A new pathology laboratory was dedicated at the National Zoological Park on January 22.

This laboratory is a direct result of the efforts of Dr. Willard Eyestone, Chief of the Veterinary Pathology Unit, NCI. For a year and a half, Dr. Eyestone and his assistant, Miss Frances Dobell, have performed all autopsies at the zoo to determine the incidence of cancer among captive wild animals. During this time, Dr. Eyestone and Miss Dobell have done their dissections at NIH or in makeshift quarters at the zoo. The new laboratory, located in the basement of the Reptile House, will provide complete on-the-spot facilities for their studies.

At the dedication ceremonies, Dr. William Mann, Director of the zoo, described how the laboratory will be used and demonstrated some of the equipment. Among those attending the ceremonies were Dr. Eyestone, Miss Dobell, Dr. Harold L. Stewart, Dr. Thelma Dunn, Dr. Gilcin Meadors, all of

NCI; Dr. James Peers and Dr. Robert Habermann of NIAMD; and Dr. Ernest Walker, Assistant Director of the zoo.

During the past 13 months, Dr. Eyestone and Miss Dobell have autopsied 116 mammals, reptiles, and birds. Dr. Eyestone states that this is a very low death rate for a zoo the size of National Zoological Park.

The animals die from a variety of infections usually complicated by old age. One case of cancer of the thyroid gland was discovered in a plains wolf. It is interesting to note that almost all of the carnivorous animals showed evidence of functional disorders of the thyroid gland. Although monkeys are particularly susceptible to tuberculosis, no cases were found in the zoo primates. Only one case of tuberculosis was found--and that was in a reindeer.

Facilities of the new pathology laboratory are available to all NIH scientists.

Dr. ISBELL TALKS ON NEW DRUGS

The advantages and dangers of some new narcotic drugs were explained by Dr. Harris Isbell at NIH on January 22. Dr. Isbell is Director of the NIMH Addiction Research Center at Lexington, Ky. His talk was a feature of the monthly NIMH seminar series.

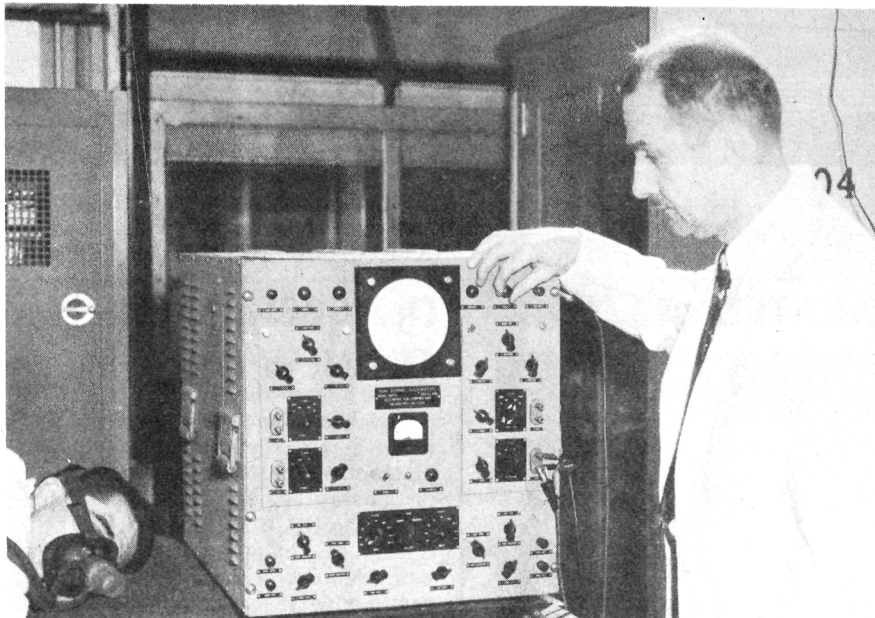
Among the analgesic drugs discussed by Dr. Isbell were methadone and N-allylnormorphine. Compared with morphine, methadone relieves pain for a longer time, and physical dependence is not followed by as severe a withdrawal illness. Another advantage is that methadone may be given by mouth. The drug is currently proving useful in treating wounded soldiers in Korea, as well as in withdrawing addicts from morphine at Lexington.

N-allylnormorphine, when administered to nonaddicts produces an effect not unlike that caused by alcohol or sleeping pills. However, it produces in morphine addicts symptoms as severe as those accompanying morphine withdrawal. It may be possible to use N-allylnormorphine to determine quickly whether a person is a morphine addict.

One of the functions of the Lexington laboratory is to test potentially addicting drugs introduced into world markets. Findings are submitted to the National Research Council and the United Nations for use in determining legal measures for controlling distribution of the drugs. Dr. Isbell said that many drugs appearing on the market are represented as capable of relieving pain as effectively as morphine, without causing physical dependence; none yet investigated has fulfilled this promise.

Studies in Pulmonary Ventilation

No. 66 of a Series



Dr. Specht, using the oscilloscope, traces breath velocity pattern of Charles H. Hanna.

The field of pulmonary ventilation is one of the oldest branches of physiology. Undoubtedly resuscitation was one of the first procedures in which man found himself directly interested in this problem. Despite a long history of observation, the phenomena that take place in the lungs during ventilation are still incompletely known. In recent years, however, new methods of physical measurement have facilitated research on the respiratory process.

Dr. Heinz Specht and associates in NIA MD's Section on Physiological Physics are studying the breath flow patterns of subjects under various conditions. Among other projects, respiration at high altitudes has been investigated. Work on oxygen breathing equipment has indicated that rarefaction of the respired air influences breathing in many persons even though there is no oxygen want.

It has also been shown that similar effects are induced by altering the density of the respired air with helium or a heavy gas. Some basic index may yet be established for normal and for various degrees of abnormal pulmonary ventilation.

Another fundamental problem in which the group is interested is measurement of the alveolar area--that is, the surface across which oxygen and carbon dioxide are transferred in aerating the blood. Once this is measurable--and studies with active gases like carbon monoxide suggest new approaches--it will be possible to estimate the thickness of the alveolar barrier. This would be highly valuable in the diagnosis and evaluation of many pulmonary abnormalities.

Laborious chemical methods of measuring gases are still practiced in most laboratories, but this section applies new physical techniques for continuous and practically instantaneous assay of carbon dioxide, oxygen, nitrogen, carbon monoxide, etc. These techniques, as well as gas-flow measuring devices, enable the group to tackle many problems in this field.

A recent investigation showed that the transfer of nitrogen across the alveolar barrier was more rapid in an expanded lung than in a compressed one. This is an important factor in the efficacy of the back-pressure, arm-lift method of artificial respiration.

Here and There

Farewell Party

Dr. Roscoe R. Spencer, NCI, who retired from PHS on January 31, was guest of honor at a party at the Officer's Club of the Naval Medical Center on January 30.

Dr. Branham Honored

At a recent meeting of the Society of American Bacteriologists, Dr. Sara E. Branham, Chief of the Bacterial Toxins Unit, NMI, was elected councilor-at-large for a two-year term.

Hospitalization

Everyone is urged to complete the questionnaire regarding hospitalization and return it to the Personnel Office, Room 21, Building 1. Your cooperation in this survey may enable someone who desires it to get membership in Group Hospitalization.

Bloodmobile Visit

The Red Cross Bloodmobile will again visit NIH on Wednesday, February 27. Appointments will be made as usual through the Personnel Branch by filling out the forms distributed in the mail. During its last visit in October, the Bloodmobile collected 122 bottles of blood from NIH donors.

Safety Manual

Chapter VII, "Personal Protective Equipment," of Safe Practices has been distributed to holders of the loose-leaf manual. Copies may be obtained from the Safety Office, Ext. 793.

New York Meetings

Dr. Ralph W. G. Wyckoff, Chief of the Section on Molecular Biophysics, NIA MD, attended the recent meeting of the American Physical Society in New York, where he presented a paper on "Some Problems Involving the Big Molecules in Biological Systems."

Dr. Robert J. Fitzgerald, NIDR, addressed the January meeting of the Microbiology Section of the New York Academy of Medicine. His talk, "Microbial Factors in Dental Caries," was part of a symposium on caries.

CRAFTSMEN PLY SKILLS, DESIGN METAL PRODUCTS

Requests for items not available on the market make ingenuity one of the prime attributes of NIH's Metal Shop. Eight craftsmen, under the direction of Thomas G. Wood, produce many needed pieces of laboratory equipment which are specially designed to the scientist's specifications.

Recently, Dr. Wilton R. Earle of NCI collaborated with Mr. Wood in designing a dessicator guard made of screen wire. From their rough sketches, Mr. Wood produced first a trial model and later 16 finished guards. Mr. James Black, NIH's Safety Officer, thought them so useful that he requisitioned a half dozen more, now available in the stockroom.

In addition to maintenance of all metal equipment and furniture throughout NIH, Metal Shop workmen make and install hoods and ducts. When laboratories are moved or some new research project is added, the men tear out the old hoods and ducts and rebuild or replace them as needed.

Test-tube holders in endless varieties of shape and size are produced for the researchers. One of the cleverest items the Metal Shop has designed is a rat-holder available in three sizes. Many special kinds of animal feeders, cages and racks are built in the shop.

When the Isotope Laboratory was constructed, the Metal and Plumbing Shops collaborated in the installation of a special line for distilled water. Now in production are dry-ice boxes which the Carpenter and Metal Shops are making.

While some requests from the laboratories are accompanied by a sketch, more often the requisitioner leaves the design of the needed article to the Metal Shop.

Some standard products, like animal cages, are produced in the Metal Shop cheaper and more quickly than they can be purchased elsewhere. Recently, however, this practice has been discontinued so that the critical supply of metals may be conserved for items not available on the open market.

NIH Spotlight



Jane Sundelof

In Japan it is an insult for guests to refuse to eat all that their hosts serve. To pretty Jane Sundelof of the Personnel Branch, this once meant eating a whole fish, including its eyes. Jane recalls that it wasn't as bad as you might think--in fact, it was rather tasty. This happened in 1947 when she was in Japan with her father, a civilian employee of the Army.

Miss Sundelof returned to the States in 1948, and after attending Hood College for a year, came to NIH on the advice of a friend who worked here.

Jane never regretted her choice. She is now a personnel clerk in the Classification Section. Her duties involve maintaining the job descriptions of all the Civil Service employees of NIH. She also processes personnel action requests--promotions, transfers, and reclassifications. When annual leave regulations were changed recently, Jane was the contact point for the many questions raised by NIH employees. She estimates that for a while she was called by an average of 20 persons an hour.

Jane is familiar to anyone who has seen a Hamster show. For two years she danced in the chorus. This year she is working on scenery and understudying one of the parts in preparation for the Hamster's 1952 production.

In addition to being a group treasurer for Group Hospitalization, Jane is Buildings Representative (Bldg. 1) for the Recreation and Welfare Association. When necessary, she substitutes in the NIH Bowling League. In spite of these activities, Jane still finds

DR. OLIPHANT'S FRIENDS DONATE MEMORIAL FUND

A practical and worth-while memorial to Dr. John Oliphant has been created.

Instead of flowers, a fund of \$190.65 was donated by Dr. Oliphant's friends at NIH. At Mrs. Oliphant's request, \$180.65 has been sent to Foster Parents' Plan for War Children, Inc. This amount will maintain a war orphan for one year. The remaining \$10 has been contributed for a CARE package.

This living memorial is a fitting tribute to a man who devoted his life to helping others.

R & W ASSOCIATION TO PLAN ATHLETIC PROGRAM

A meeting to discuss the athletic program of the Recreation and Welfare Association will be held in Wilson Hall, February 18, at 12 o'clock. Anyone with a constructive idea or an opinion regarding an athletic program is urged to be on hand and take an active part in establishing the athletic club.

The formation of the softball league will be discussed. The association has sufficient funds in its treasury to purchase some new softball equipment. It has been suggested that part of this money be used to purchase athletic equipment for other sports. What's your idea?

Since the athletic club is part of the Recreation and Welfare Association, interested persons must be members of the Association to be eligible for all athletic activities. It is hoped that as many of the ladies as possible will take part in the athletic programs which are being planned.

For further information call Mr. Britton H. Smith, NIH Athletic Director, on Extension 337.

time to pursue her hobbies of painting and making shell jewelry.

Jane was born in Boston in 1929 and has lived all over the country. "I guess my family must have moved about fifteen or twenty times," she says, "so it's a good thing that I like to travel."

CLINICAL CENTER NURSE APPOINTMENTS ANNOUNCED

Since Miss Mildred Struve, Chief of the Department of Nursing of the Clinical Center, arrived at NIH last September, a number of top nursing appointments have been made. Lois Gordner and Kathryn Knight are Associate Chiefs of Nursing. Gwen Tudor has been selected as Associate Chief of Nursing Services for NIMH, with Elizabeth Walker in the corresponding post for NCI. Evelyn Gombert is assigned as Assistant Chief of Nursing in charge of In-Service Training programs for Professional Nurses.

In 1949, Miss Gordner and Miss Gombert were assigned as nurse consultants to the Research Facilities Planning Branch where they were very active in the planning phase of the Clinical Center.

Miss Gordner received her B.S. from Earlham College and her M.S. from Western Reserve University. From 1944-47 she was Assistant Director of the Veterans Administration's Nursing Service.

Previous to her RFPB assignment, Miss Gombert was a psychiatric nurse consultant in NIMH. She received her B.S. from Russell Sage College and did graduate work in education there and at Teachers College, Columbia University.

Miss Knight comes to the Clinical Center from Emergency Hospital where she was Director of Nursing. She has her B.S. and M.S. degrees from Catholic University.

After graduating from the University of Iowa, Miss Tudor received her M.A. in psychiatric nursing from Teachers College, Columbia University. She comes to NIH from the University of Iowa Psychiatric Hospital where she was Director of Psychiatric Nursing and Assistant Professor of Nursing.

Elizabeth Walker received her B.S. from Boston University and her M.A. from Teachers College, Columbia University. She was formerly Assistant Director of Nursing Education at Memorial Hospital, New York City.

The Department of Nursing in the Clinical Center will have a unique opportunity to initiate a nursing program combining modern nursing care and research.

QUIZ ON FIRE EXTINGUISHERS



DR. WILLIAMS' HISTORY OF PHS NOW AVAILABLE

A long-awaited book, The United States Public Health Service, 1798-1950, by Dr. Ralph C. Williams, has been published.

Dr. Williams, now retired, was an Assistant Surgeon General of the Public Health Service. For many years his hobby was collecting scattered facts about the Service. When the Commissioned Officers Association of the Public Health Service decided to sponsor a comprehensive history of the Service, Dr. Williams volunteered for the job. The result of his work is an extremely interesting 900-page narrative, based on long hours of painstaking research.

It is a book that would be of value to every NIH employee. Most of us are aware of the contributions the Public Health Service has made to medical science, but few of us know the personal story behind the men whose struggles made history.

Dr. Williams' book may be ordered from the Commissioned Officers Association. The price is \$7.50. For order blanks or further information, call Dr. Byron Olson, Ext. 380.

1. Which extinguisher should be used against ether, acetone, or gasoline fires?

2. Which type should be used to extinguish paper, excelsior, or wood fires?

3. Which should be used to fight an electrical fire?

4. Why is it unsafe to use type A or C on "live" electrical equipment?

5. Type A will operate immediately when inverted; type C will operate when inverted and struck on the floor. Is it necessary to know which is which?

Answers:

1. B (carbon dioxide extinguisher).

2. A (soda and acid extinguisher) or C (self-expelling water extinguisher).

3. B.

4. Water stream will convey electrical current through operator's body.

5. No, not if user remembers to strike the extinguisher against the floor if it does not operate automatically when inverted.

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